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Six Minute Snake Bite is a composition for bass clarinet and electronic audio track. The goal was to create a piece that exhibits intensity and aggressiveness generated through the use of computerized sounds, and fuses the concert hall tradition with the sounds of progressive rock. In order to achieve this, I modeled the piece off of pieces by dance and rock music groups such as *Dub Trio* and *Death Grips* by experimenting with the compositional tools, strategies, and sounds that these artists used. I also sought out information from the performer, Asher Carlson, on specific ways to achieve these results through the bass clarinet. *Six Minute Snake Bite* was written specifically for Carlson, who, through collaboration and questioning, guided the use of extended techniques, as well as the development of more traditional musical passages. The concert hall tradition is represented in the piece through its structural elements and approach to motivic development.

SIX MINUTE SNAKE BITE FOR SOLO BASS CLARINET AND BACKING TRACK

by

Shawn H. Milloway

A Thesis Submitted to
the Faculty of The Graduate School at
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in Partial Fulfillment
of the Requirements for the Degree
Master of Music

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2017

Approved by

_____
Committee Chair

APPROVAL PAGE

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Date of Acceptance by Committee

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Date of Final Oral Examination

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CHAPTER I

INTRODUCTION

Six Minute Snake Bite is a composition for bass clarinet and electronic audio track. The goal was to create a piece that exhibits intensity and aggressiveness generated through the use of computerized sounds, and fuses the concert hall tradition with the sounds of progressive rock. In order to achieve this, I modeled the piece off of pieces by dance and rock music groups such as *Dub Trio* and *Death Grips* by experimenting with the compositional tools, strategies, and sounds that these artists used. I also sought out information from the performer, Asher Carlson, on specific ways to achieve these results through the bass clarinet. *Six Minute Snake Bite* was written specifically for Carlson, who, through collaboration and questioning, guided the use of extended techniques, as well as the development of more traditional musical passages. The concert hall tradition is represented in the piece through its structural elements and approach to motivic development.

The main challenges included discovering the specific qualities that could elicit such a style, and highlighting clear methods and tools to achieve this overall sound. This required searching through commercial music, online forums, the use of digital modeling of drum and guitar sounds, software programs, and types of hardware. The resulting piece is intense, constant, noisy, and mechanistic while providing the grooves of popular music, and the motivic development of the concert hall tradition. I intend to implement these qualities and methods into my next pieces, but plan on taking the idea

of using digital backing tracks further by making the electronics more of a centerpiece in future compositions.

CHAPTER II

SEARCH FOR TOOLS

Six Minute Snake Bite required specific tools to achieve the computerized and fragmented sounds that I desired. Finding these tools took research on youtube, internet forums, programmer's websites, and textbooks. Eventually, I used a mix of software, each with unique capabilities and limitations. Some were flash-based GUI's accessed through websites, some were hardware guitar pedals, others were plug-ins. Ultimately, these formed the backbone of the digital sounds that comprise *Six Minute Snake Bite's* backing track.

In my experience, digital effects have often been described as "cold," or "brittle" in sound quality. These associations potentially stem from qualities such as lack of saturation (slight distortion of upper harmonics often found in tube equipment), unflagging constancy, and lacking the circuit noise found in the output from hardware synthesizers. I wanted to take advantage of these qualities and highlight them in my track. In order to do this, I bused all of the recorded acoustic instruments through analog-modeling busses, analog console modelers, and virtual tape machines.

Virtual buss compressors found in *Steven Slate's Virtual Buss Compressors* series,[1] and the *Virtual Consoles Series* [2] use non-linear summing in order to achieve a quasi-analog sound in the style of classic mixing consoles and compressors like the ones used at Abbey Road studios.[3] *Steven Slate's Virtual tape machines* work similarly, but they model the physical qualities of electromagnetic tape such as sub-frequency build-up of fifteen inches per second recording speeds, and the hiss and flutter created as it records.

Most of the digital effects that I found useful utilized granular synthesis. I found that this type of synthesis lends itself well to the sound I had in mind because it can use sample and hold buffering to stutter and fragment sounds. At the beginning of my search for granular synthesis and audio filtering tools, I looked through forums focusing on music production and audio editing. These included *gearslutz*, *kvraudio*, and soundonsound online magazine's forums. *Gearslutz* is a DIY- focused music production community that features forums on audio hardware to aid studio-related tasks. This forum was helpful for identifying stomp boxes that could achieve granular sounds, as well rack-mounted units and other equipment. *Kvraudio* is a forum designed to feature independent music plug-in developers, who often offer their products for free or little cost.[4]

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[1] *Virtual Buss Compressors,* <http://slatedigital.com/virtual-buss-compressors/> (accessed 15 January 2017).
[2] *Slate Digital VCC: the Virtual Console Collection,* last modified 2016, <http://slatedigital.com/slate-digital-vcc-the-virtual-console-collection/> (accessed 15 January 2017).
[3] The *Virtual Series Console* titled *Brit 4k* models the *Solid State Logic* mixer used for a period of time in Abbey Road Studios.
[4] *What is KVR?,* <https://www.kvraudio.com> (accessed 10 March 2017).

Kvraudio was excellent for finding software synthesizers and spectral shapers that provided little details to my project. *Soundonsound* is at the forefront of audio production journalism. Their forums helped me address a variety of issues from synthesis and equalization, to mixing and mastering.[5]

Transarkiv is an interactive, flash-based plug-in developed by Rui Dias, Tiago Angelo and Gustavo Costa of the Sonoscopia project.[6] The plug-in features high-quality samples of instruments and noises performing various styles of lines that move in a number of different ways along a spectral shifter.[7] Sonoscopia offers the sounds in *Transarkiv* to be used royalty-free in artistic projects.

Transarkiv was most useful for the beginning of the piece because of its slowly morphing, metallic sounds. I recorded the sounds performed by the plug-in and implemented them into the track. The attacks and durations of the sounds aren't easily controllable, so the less-strict event structure of the introduction lends itself to such a resource. Furthermore, the plug-in features the sounds of machines, making the resource perfect for setting the overall tone of the piece.

Glitchmachine's Fracture and *Hysteresis* plug-ins digitize and glitch source sounds.[8] These plug-ins were integral to the development of the dubstep genre in the early 2000's and have been re-engineered and marketed as such ever since.

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[5] Accent. *Who else wants new forward-thinking digital synths?,* September 13th, 2016, https:// www.gearslutz.com/board/electronic-music-instruments-electronic-music-production/1112133-who-else-wants-new-forward-thinking-digital-synths.html (accessed 10 March 2017).
[6] *Transarkiv*, http://www.sonoscopia.pt/en/transarkiv (accessed 10 March 2017).
[7] The x and y axes map stereo image and ascending volume respectively.
[8] *Fracture,* 2005, http://glitchmachines.com (accessed 10 March 2017).

Dubstep features rhythmic use of low frequency oscillators (LFOs) and noisy synthesizers that mimic the sound of a computer that has a malfunction like a faulty sound card or a computer-processing-unit overload. The plug-ins' use of granular processing, LFO, delay, and large amounts of feedback create distortions of source sounds that achieve this.

Narrativas Sonoras 2 features a pictorial view of given transients that you can make granular loops with by scrolling around the image using a mouse-guided cursor.[9] The material it creates is highly repetitive, and completely replaces the sounds that it alters. Because of this, the sounds that it creates are often very short, and represent too little of the source sound to match the sound image, punch, and volume that the other instruments around it have; therefore, this program is best suited for creating short and stuttering interjections to add fragmentation to musical lines.

[9] *Works,* http://ruipenha.pt/works/ (accessed 20 March 2017).

CHAPTER III

IMPLEMENTATION OF EFFECTS

I wanted the drum recording in the backing track to morph modified, yet recognizable, sounds to nearly unrecognizable and digitized sounds very sporadically. *En Passant* by *Dub Trio* features glitchy echoes that inspired and guided my ear as I was searching for these digitized sounds.[10] *Dub Trio* often uses these echoes to embellish their repetitive grooves with explosions of mangled noise. However, the original groove is often left identifiable as they manipulate these echoes and stutters. In order to create a similar effect with the original recording of the drum kit (performed by Jonathon "JR" Sale), I looked towards tools that would provide a digitized and altered sustain to the snare drum and cymbals, render the original sounds of the kit completely unrecognizable while still maintaining the groove, and rapidly repeat layered fragments of the drum kits' sounds that would not act as echoes, but act as the groove itself. Several signal chains involving echoes and granular synthesis plug-ins in different combinations proved especially useful to achieve this.

The first signal chain uses UrsaDSP's *Lagrange* delay plug-in, as well as another delay for thickening.[11] *Lagrange* offers a granular delay that emits grains at different points in a delay buffer to achieve evolving sounds.

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[10] Dub Trio, *En Passant,* from *Another Sound is Dying,* Orinda, California: Ipecac records, 2008.
[11] Elton, Dave. *Recent News*. https://www.ursadsp.com (accessed 20 March 2017).

This plug-in was essential to creating a digitized sustain for the drum kit, because of the way it alters and randomly buffers source sounds without rendering them completely unrecognizable. The second signal chain that I created for the drum kit uses a light distortion of the original signal that is fed into *Glitchmachines's Fracture* plug-in.[12] In this signal chain I utilized *Fracture's* ability to drastically alter the source sounds of the drum kit. I did this by tapping into the plug-in's highly-customizable granular buffer in order to shape the distorted transients into a cloud of sound with a specific density. I chose to repeat two- millisecond grains, four times per trigger because this gave the sound a porous quality directly relatable to a recording I did with a computer's malfunctioning sound card. Because this recording was the direct result of glitchiness (hardware that is literally malfunctioning), I decided it fit well within the sonic world of the piece; therefore I established it as the goal for *Fracture's* modifications.

In the third signal chain I was able to take the components from the second signal chain (described above) and manipulate the settings of the distortion to achieve a drastically different result. The distortion in the third signal chain is set to twice the depth of the second. With the same settings in the Fracture plug-in, the distortion overloads the feedback parameter in the plug-in and creates a wash of sound.

Lastly, I created a signal chain intended to augment the sound of the first chain by adding swells to the upper frequency band. I did this by using the same *Lagrange* plug-in, but I placed a reversal plug-in before it in the chain. The result achieved adds depth and sustain to the effect created by the first chain of plug-ins.

[12] Ivanov, Ivo. *Fracture*. 2005. http://glitchmachines.com (accessed 10 March 2017).

All of the guitar sounds needed to have a thicker sound in the mix than they did when I initially recorded them. This required a well-defined width in the stereo image, as well as parallel processing in order to set a minimum volume for the tracks. Therein, I tripled the guitar tracks using three different reamplification settings, used a delay with different settings in the left and right channels, and used a stereo buss with a plate reverb to add stereo width and volume to the guitars. The delay has a ten-millisecond offset in the left channel and a twenty-millisecond offset in the right channel. When added at about twenty percent of the volume of the original sound of the three guitar tracks the stereo image is emphasized and the middle frequencies of the sound are thickened. Having a lot of the dry sound of the guitars was important to achieving a thicker sound, while establishing a sense of space in the mix. Therein, the reverb needed to be set with a sixth-tenth of a second decay, and a ten millisecond predelay in order to fit the tempo and style of the track.

In order to achieve the guitar tone that I wanted, I based a lot of my search on the sound of the distortion that the guitarist of *Dub Trio* has used across their discography. In the piece *Word*, a tremolo section with a high-pass filtered and slightly distorted guitar tone arrives at 4'10".[13] I looked towards these timbres and registers when writing the third section of *Six Second Snake Bite*. In *En Passant* there are homorhythmic passages at the beginning of the piece.[14] The sound of the guitars in these passages influenced my timbres in bars thirty-two through forty-four. In order to achieve these tones, I used a reamplification plug-in.

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[13] Dub Trio, *Word,* from *IV,* E1 Entertainment, 2011.
[14] Dub Trio, *En Passant,* from *Another Sound is Dying,* Orinda, California: Ipecac records, 2008.

Even though the guitars were recorded with analog tube distortion, a digital distortion was necessary for a tighter and more distorted tone.

Three guitar pedals were used to create the multiple layers of guitar sounds in *Six Minute Snake Bite*. These layers also helped to achieve a richer sound. A tube distortion pedal with a 3-band equalizer, a tremolo pedal with an expression pedal, and a volume pedal. Tube distortion was an important choice for the grit that it imparts on the sound of the guitar. The equalizer bands were important for the coloration in the introduction. In the last section of the intro, at bar twenty-three, multiple layers of differently-equalized guitar have staggered entrances that intensify the building of tension that is occurring. Furthermore, light distortion with altogether different equalizer settings are used for variety in interjections of the introduction.

The synthesizer sounds of *Death Grips* create a thick, yet wavering sound in their track *You Might Think He Loves You For Your Money But I Know What He Really Loves You for It's Your Brand New Leopard Skin Pillbox Hat*.[15] They achieve this by using a doubly-tracked synth with two different tremolo settings on each side of the stereo field to create a faltering and rough sound. This inspired my search for guitar tones in the repeated quarter note passages at bar forty. Also, it was used for several interjections at the beginning of the introduction.

[15] Death Grips, *You Might Think He Loves You for Your Money But I Know What He Really Loves You For It's Your Brand New Leopard Skin Pillbox Hat,* from *Government Plates,* Harvest Records, 2014.

CHAPTER IV

THE CONSTRUCTION OF THE PIECE

Six Minute Snake Bite is the culmination of the work I have been doing over the past two years. It is the result of a number of test pieces, each of which experimented with different musical qualities that are present, at least in part, in the current composition. *Android Instructional Video* (2015) features a certain strangeness of spoken text, along with what became the main theme of *Six Minute Snake Bite* in its most intense section. *Seismic* (2016, for electric guitar, violin and cello), sought to incessantly shift between loosely related grooves, and melodies with funk-influenced rhythms and atonal harmonies. This piece approached the machine-like aggression I tried to achieve in S*ix Minute Snake Bite*. I applied the lessons that I learned from *Seismic* to *Six Minute Snake Bite* by limiting the number of themes while composing changing textures instead of new themes. In *Hinder* (also 2016, for guitar and backing track) I focused on creating drum set and guitar tones that embodied my response to the sounds of popular music groups such as *Death Grips*, and *Dub Trio*. This response featured digital processing, as well as the use of a chain of stompboxes for the guitar and electric bass. I used much of what I discovered here when I was creating the processing chains used in the audio track accompanying *Six Minute Snake Bite*.

Since a large portion of the current piece has repetitive grooves, I knew that the introduction of *Six Minute Snake Bite* (mm. 1-32) needed to establish key sonic elements of the piece (distorted guitars, drum set sounds, synthesizers, digital sounds) without a consistent metric pulse. Therein, I sought out to create metric disorientation similar to the "false interlude" of Gerard Grisey's *Quatre chants pour franchir le seuil*.[16] Grisey uses a wide variety of percussive bursts that metrically modulate, thereby establishing the changes in metric values as the focus. I started tailoring *Six Minute Snake Bite* to this idea by finding my own metric modulations, and replacing the drum kit with concert percussion. In order to make the modulations seem as if they were a part of a large-scale progression, I avoided being too explicit on the starting points and ending points of the modulations by overlapping polyrhythmic palm muted plucking in the guitars and writing the drum kit fills with fade-ins and fade-outs. Figure 1 shows an example of the way I wrote one of the fills for the drum set. The drum kit establishes a rhythmic pulse in the last few bars of the introduction, but I placed the entire groove on the second sixteenth of every actual beat, so that the realignment on the downbeat of section one would disorient the listener.

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[16] Gerard Grisey, Q*uatre chants pour franchir le seuil, B*eimerstetten, Kairos: *WDR* Funkhaus*, 2001.*
Grisey establishes an alternation of song movements and interlude movements in his piece. The "false interlude" occurs before the second to last song. It is given a special designation because of the way it grows into the song after it without interruption. This is a surprise because none of the other interludes have seamlessly grown into songs. There is an added layer of shock because the other interludes in the piece are incredibly quiet, whereas the "false interlude" begins quietly as normal but grows into a loud and bombastic moment.

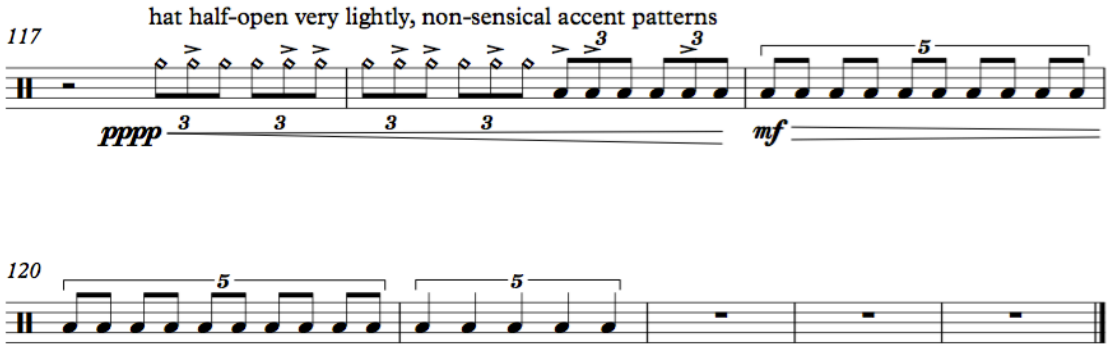

Figure 1. Drum Fills in the Introduction

En Passant from *Dub Trio's Another Sound is Dying* also inspired my drum writing at the end of the introduction and the first section.[17] I was looking for a punchy sound with occasional snare and hi-hat emphasis. The snare drum in the *En Passant* part mostly emphasizes one beat of each measure. Also, the hi-hat is used as an extension of the snare hits. I took this information to write the part shown in figure 2. I use the snare to emphasize beat four of each measure, and the hi-hat is being used to elaborate the snare hits on the second eighth note of each fourth beat.

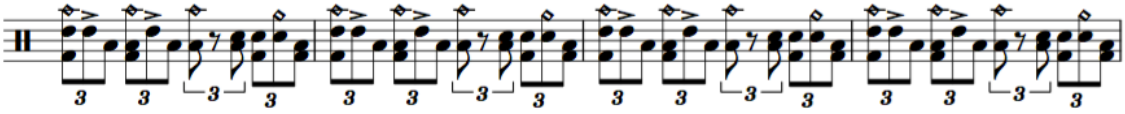

Figure 2. Drum Part at the End of the Introduction

It was clear that noise-oriented playing techniques would be needed for the bass clarinet in the introduction. These techniques include multiphonics, airs sounds, and pitchless slaps.

[17] Dub Trio, *En Passant,* from *Another Sound is Dying,* Orinda, California: Ipecac records, 2008.

The machine-like sounds of the backing track during this section fit very well with these techniques because of their noise-centric sounds, giving the introduction a clear timbral identity.

The noise-oriented sounds that Carlson and I discussed were air sounds, key clicks, pitchless slaps, and growls. The gestures needed to be discernible over the playback track, so key clicks were ruled out somewhat quickly in the collaborative process. We determined that the air sounds used in the piece needed to be loud and dense as well. This was because of projection, and also because these qualities were more fitting to the emotional content of the track. Carlson demonstrated several different methods of producing these sounds. One of the ways produced a lower-frequency spectral content to the noise. It uses the back of the throat, as well as some growling using the vocal chords. This way wasn't as ideal, but if it was used both sparingly and in conjunction with another method, it would fit nicely into the writing. This second method features a more forward placement on the mouthpiece. Compared to the first method, it has higher-frequency spectral content, and is significantly louder. Because it covers a wider range of the spectrum it also seems thicker than the first noise.

Carlson recommended that the fundamentals of the multiphonics that I choose come from the lower register of the bass clarinet. This is so that I can have both a wide variety to choose from, and a wide range of chord-balances to choose from.

Section One contains the main theme of the piece (mm. 32-36). This theme is shown below in figure three. The goal of this section was to establish a rock style, but have it sound as if the musical material surrounding the theme was getting pulled in different directions. This was accomplished by the use of quick textural changes and the elaboration of the theme with a changing accompaniment.

There are two homorhythmic statements of the main theme in the first large section. The music in between these statements is made texturally more complex in order to differentiate the material. First, there are two phrases of quarter-note gestures that feature rising harmonies. These phrases have two voices: the clarinet and its doublings, and the elaborating off-beats that happen once every bar. Secondly, another phrase has an elaborated statement of the theme with three voices: the drums, the clarinet, and the palm-muted guitar. The elaborated statement uses the upper bass clarinet, along with a quieter drum set part. These qualities are completely different from the initial statement of the theme. This brief pulling away from the main theme is enough to maintain cohesiveness, but not enough to establish a full section in itself; therefore, it gives the impression that the theme is getting led in different directions very quickly, if not somewhat hectically.

The phrase shape of the clarinet's line in the first section also reinforces this notion of the material cutting away, coming back, and getting led in different directions. At the beginning of section one, the bass clarinet is in its lowest range (mm. 33-39). This can be seen in Figure 4 below. The bass clarinet only stays in this register for a brief amount of time before leaping upwards an octave for the quarter-note gesture (mm. 40-44). Then, the elaborated theme jumps upwards a fifth (mm. 46-48), the next quarter note gesture rises an octave (mm.53-56), and then the final statement of the section drops down an octave and a tritone (mm. 57-64).

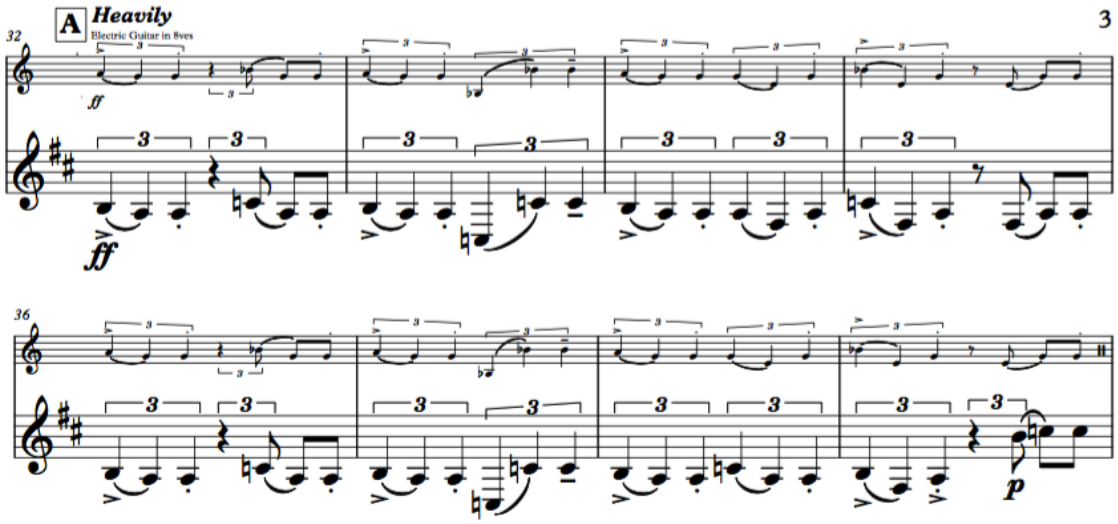

Figure 3. The Main Theme

These jumps in register are intentionally placed at the beginnings of phrases, and at new material in order to make the line seem disoriented, or as if the lines are getting pulled about into different registers with new material.

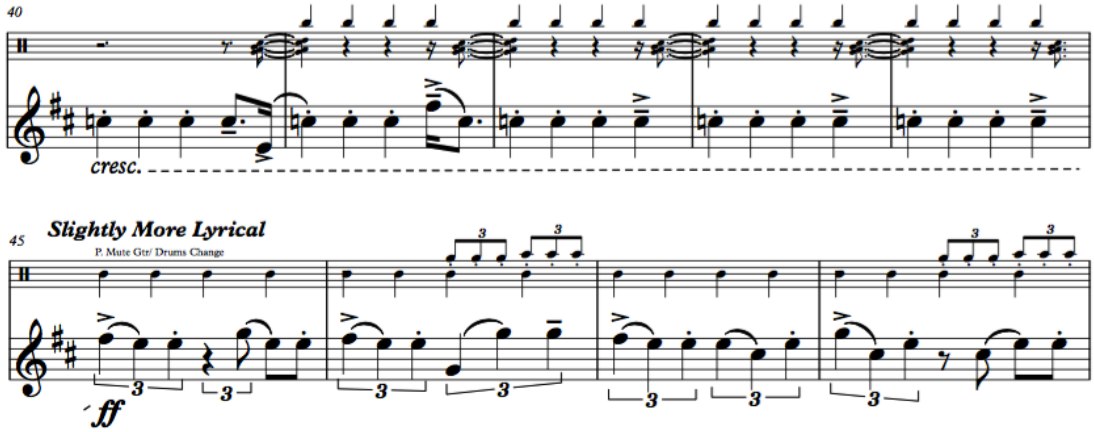

Figure 4. Quarter-Note Gesture

Carlson and I also discussed different ways to interpret the timbers and articulations of the main theme. It turned out that it is best to give an edge to the sound by using a little bit of a growl to add grit to the tone as well as using overemphasized accents to add punch.

In the Section Two of *Six Minute Snake Bite* (mm. 65-94), I sought to use delays and more lyrical lines to depart from the first section's material. *Dub Trio* inspired this textural shift between the two sections. The parallel movement of the guitars in the second section of *Word*, from the album *IV*, plays off of the homorhythmic and thickly scored passages at the beginning of the song. The contrapuntal lines that the delays create in the second section of *Six Minute Snake Bite* provide a similar contrast to the homorhythmic main theme in the first section.

The contrapuntal texture features the use of delays, reverb, and canonic imitations to create a digitized echo of the bass clarinet line provided a means to achieve this contrast. The way that these effects are convolved with the melody create fragmented relationships that shift every phrase. Initially, there are two other guitar tracks besides the one doubling the clarinet. One of these tracks is offset to put it in imitation of the other. Furthermore, these guitars have delays that are at different time scales, and one of the delays changes time scale between phrases. These combined effects create a sense of layering throughout the passage. The density is enough to provide accompaniment and some sense of harmonic motion, but because of the phrasing of the delay's decays, there is still the impression that the dense sound is emanating from the bass clarinet.

Section Three (mm. 98-end) is intended to be the climax of *Six Minute Snake Bite.* I knew that the most tense moment in the piece (mm. 146-end) needed to give a larger context to the interruptive relationship between the main theme and the quarter-note gestures in the first section. To create this larger context, I highlighted the way that the main theme alternates with the quarter-note gesture in the Section One by rhythmically augmenting the time scale that the alternation occurs on in the Section Three. As a byproduct of this elongation, there is a forty-six bar build (mm. 98-144). At the height of this build, the quarter-note gesture almost becomes an independent section but is cut off by the main theme after one eight bar statement of the new march-like theme it introduces. It almost becomes a march because of the quarter note pulses that occur in the guitar between measures 122 and 152, and the militaristic flam patterns in the snare drum between measures 140 and 152.

The dissipating ending of *Six Minute Snake Bite* is intended to leave the listener hanging. I did this by placing the final fade out after a departing point in the melodic line that occurs at measure 162. This departure is coupled with the fact that the last harmony of this section begins a modulation that it never completes. There is no real tonal center in *Six Minute Snake Bite,* but the ending still provides a deceptive harmonic move because the ten preceding bars establish a chord fairly strongly through their repetition.

CHAPTER V

CONCLUSIONS

Six Minute Snake Bite meets my goals for intensity and aggressiveness. It has a building introduction, a constant push to the third section, and a strong climax that ties together motivic material that is first present in the section one. The rock-influenced and computerized sounds that I strove to achieve are represented in the sound of the drum kit, the guitars, and the digital modification and the processing of the track. The processing itself is fitting in that it uses stuttering echoes, and distortions of the source sounds while leaving recognizable elements in tact. Also, the bass clarinet in *Six Minute Snake Bite* creates an interplay with the track, providing depth to the piece's motivic development.

I believe that in future projects I will try to focus on integrating the acoustic instruments that I use further into the material of the backing tack. Using similar computerized echoes to create an interplay digital and acoustic sounds might provide an avenue for developing this notion on a deeper level. The idea of fragmentation could also be explored further in my music. Creating entire sections based on the instrumental lines becoming mangled and computerized might establish a more convincing depiction of the computerized sounds that I am looking draw attention to in my work. Lastly, I feel that the extended techniques that I use in the piece could be better integrated into the music. Confining them to the introduction leaves questions open as to how they fit into the development of the piece. I believe that finding a way to distort and stutter the

clarinet sound in real life using the techniques Carlson and I discussed would allow the sounds to play an important role in the piece and its development.

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APPENDIX A

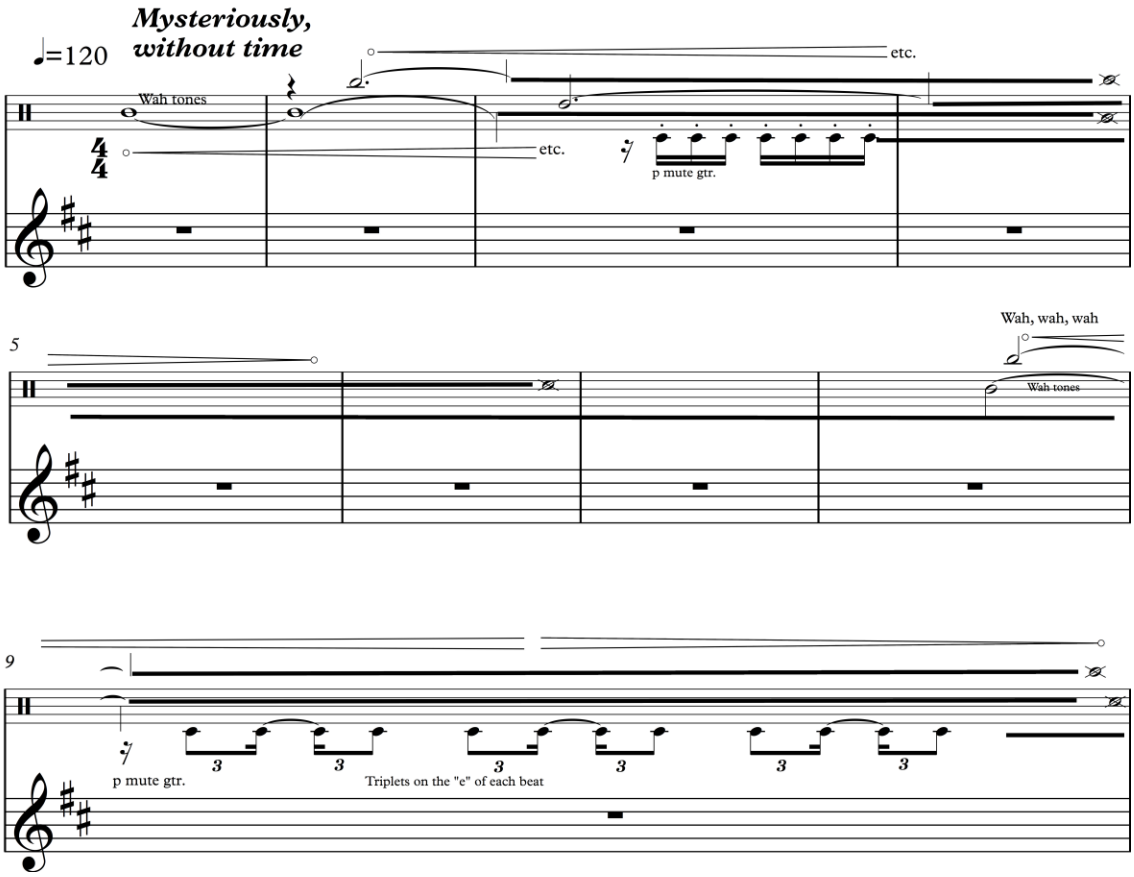
SCORE

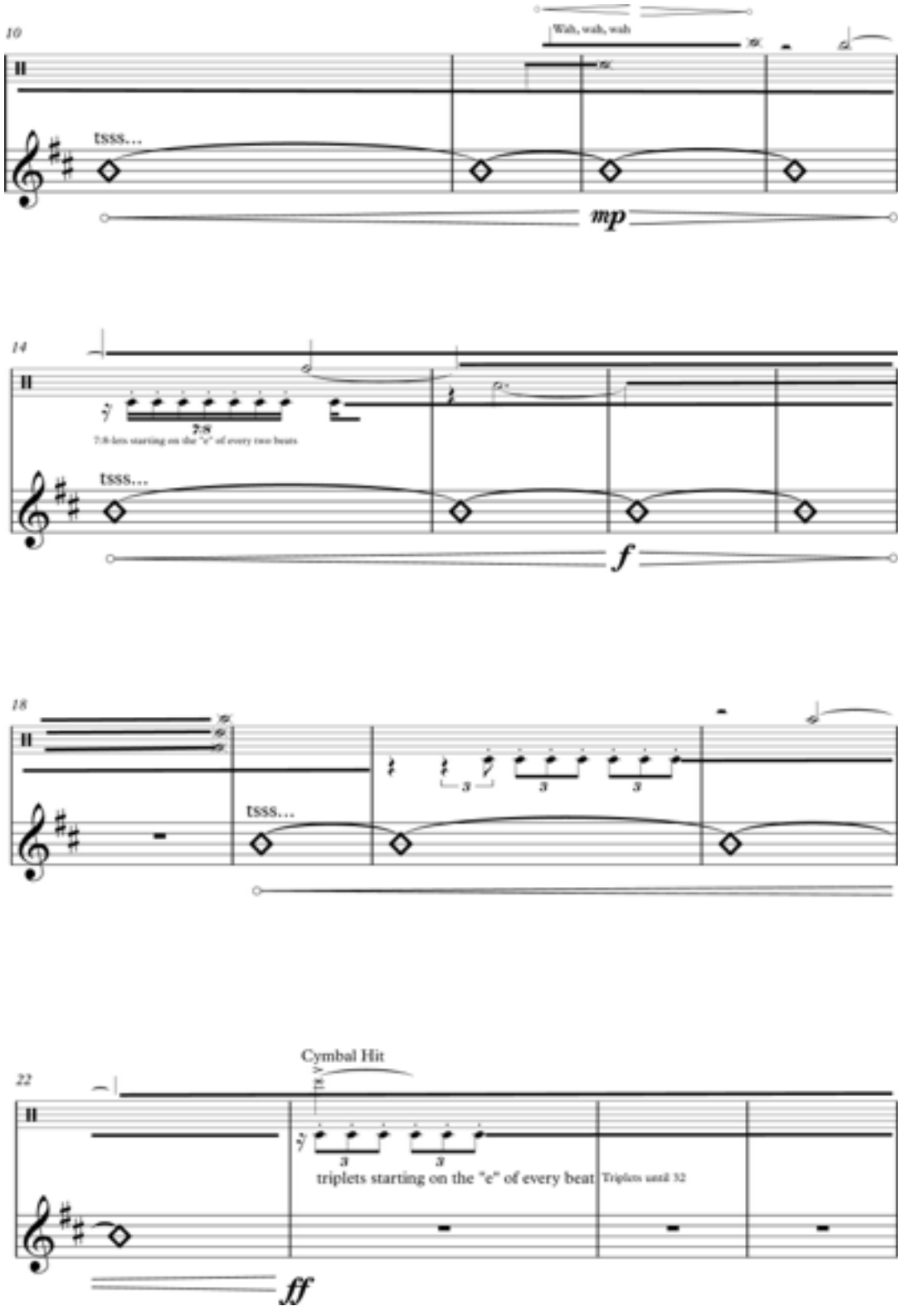
Transposed Score

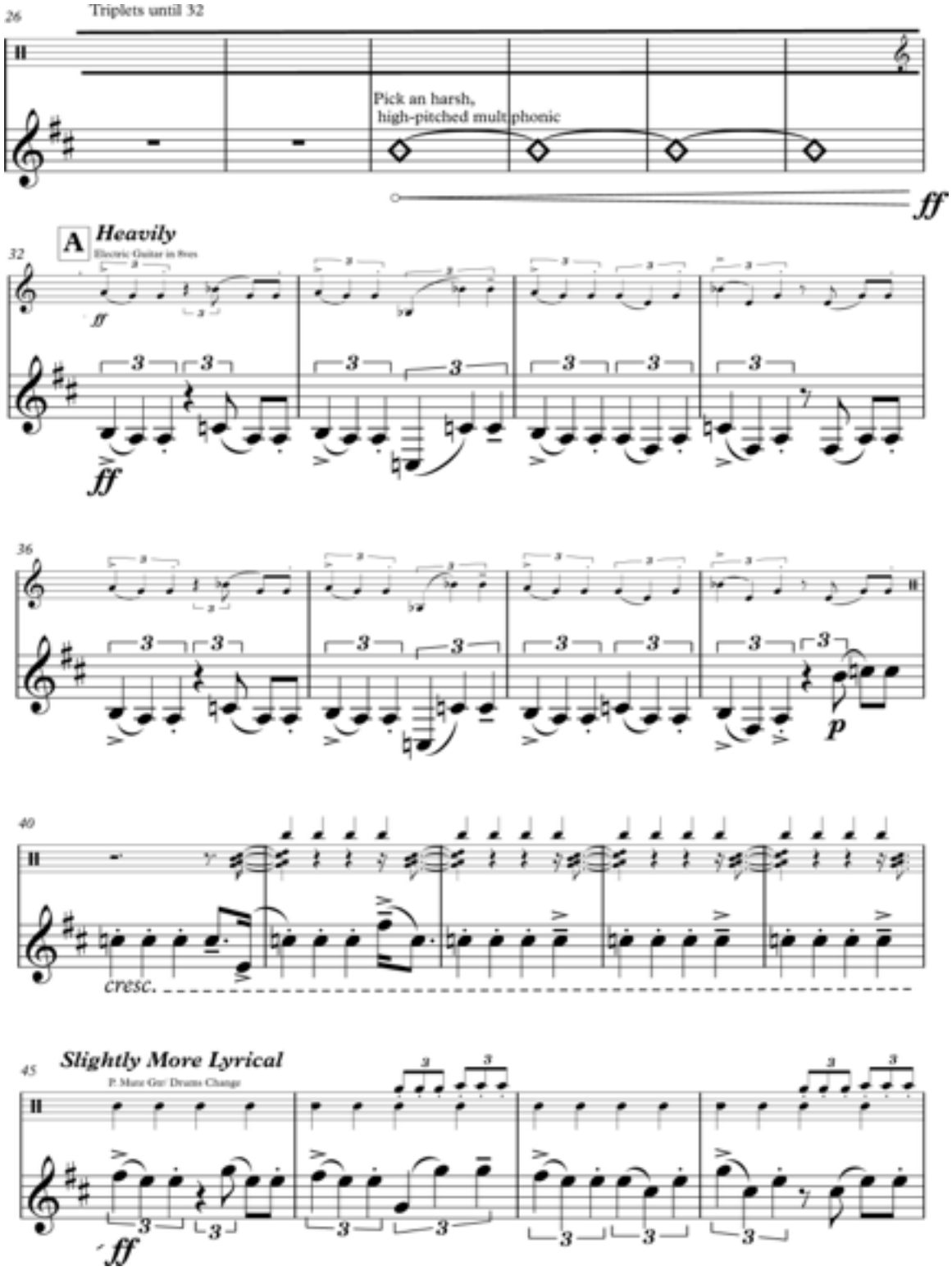
Six Minute Snake Bite

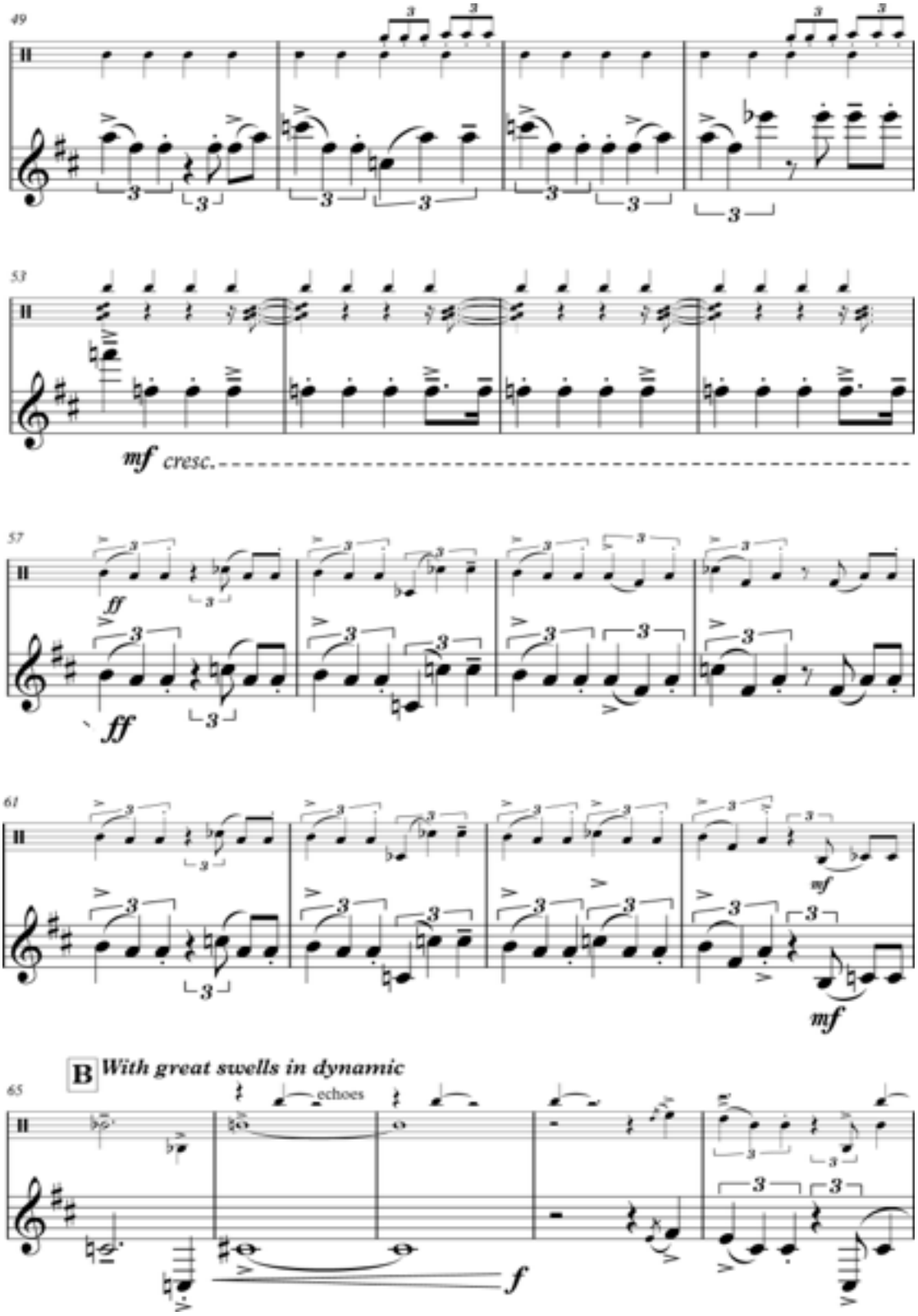
For Asher Carlson

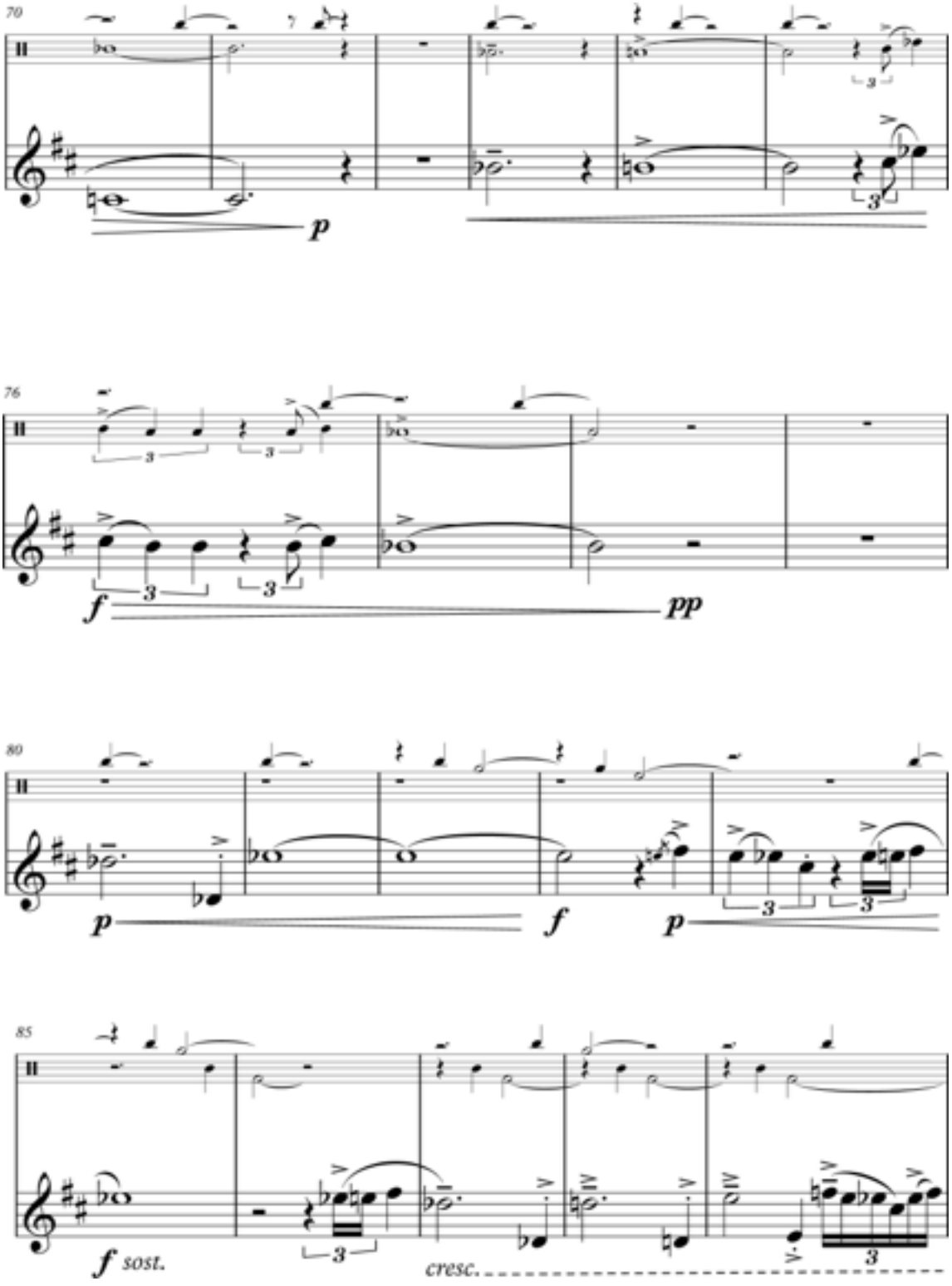
Shawn H. Milloway

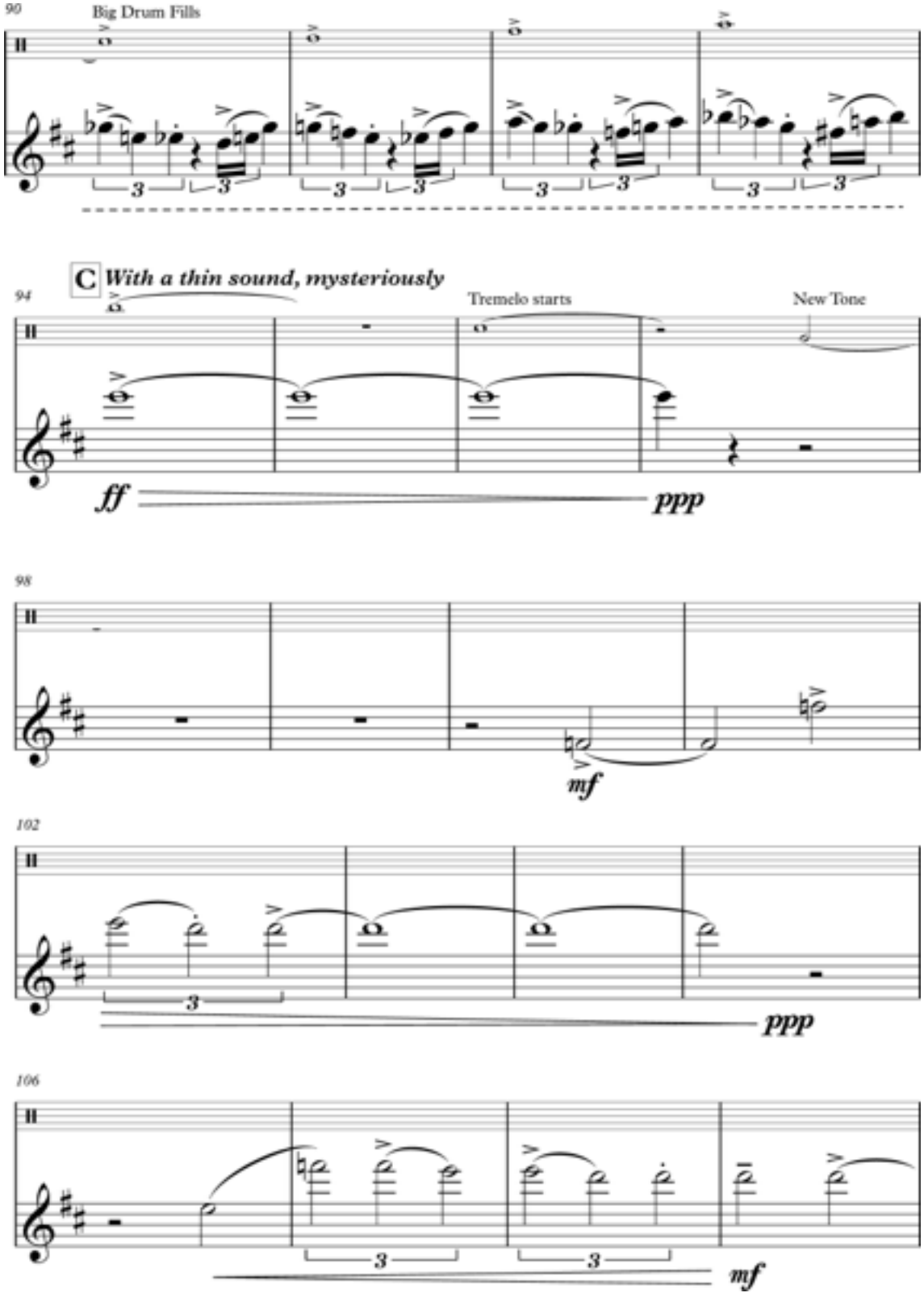


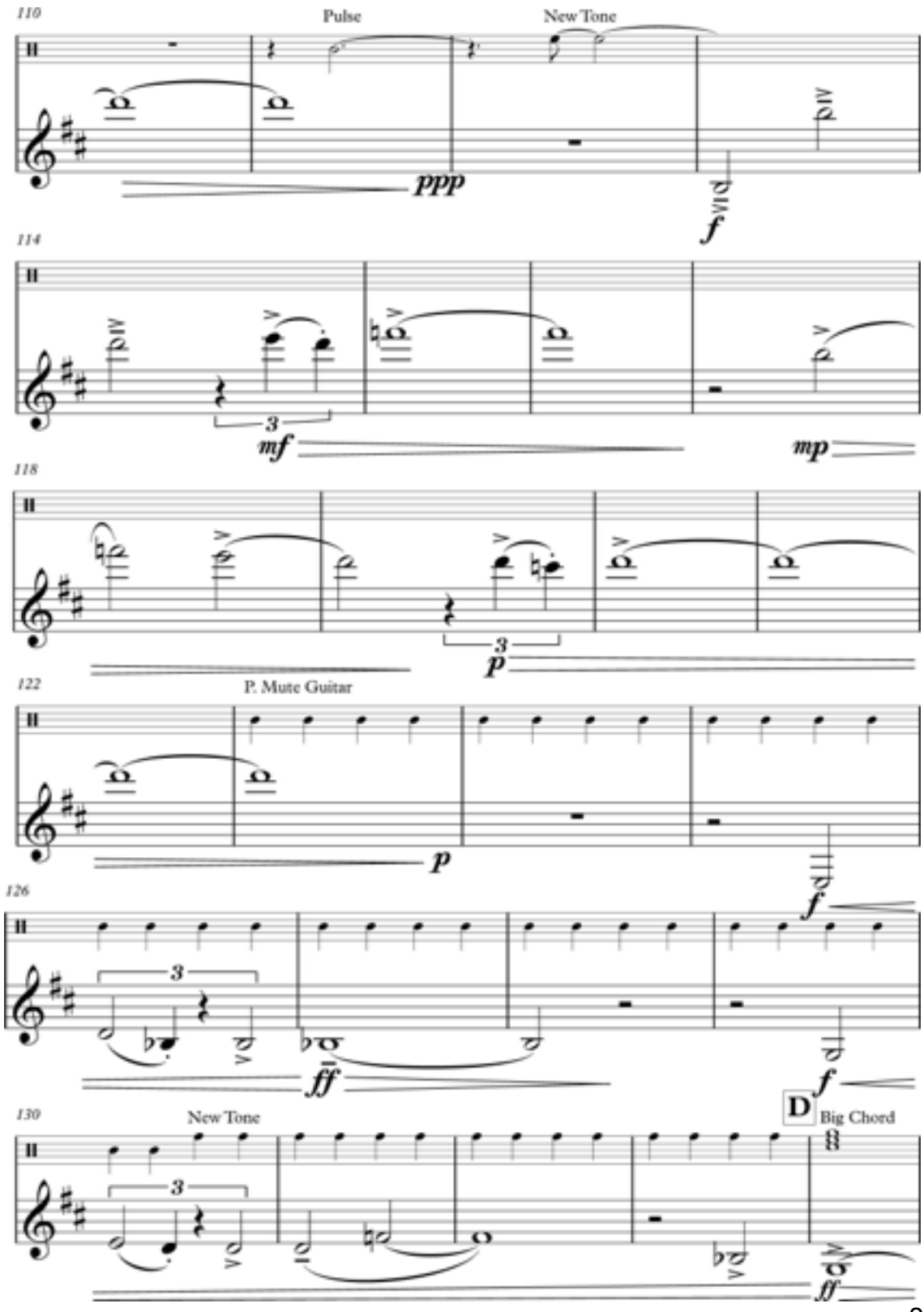

10
Wah, wah, wah
tsss...
mp
14
7:8
7:8 lets starting on the "e" of every two beats
tsss...
f
18
tsss...
3
3
3
22
Cymbal Hit
3
3
triplets starting on the "e" of every beat
Triplets until 32
ff

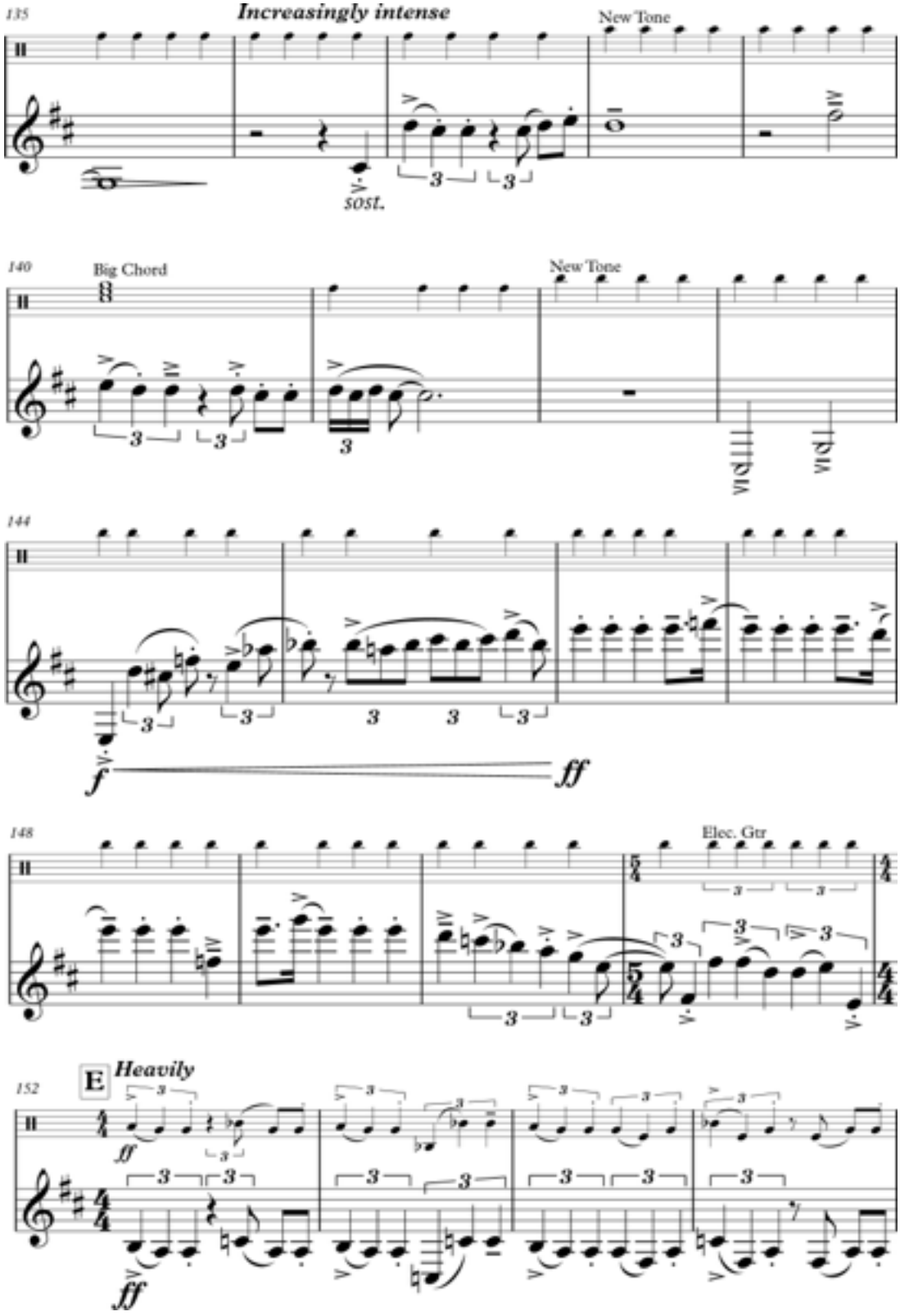

26
Triplets until 32
Pick an harsh,
high-pitched multiphonic
ff
A
Heavily
Electric Guitar in 8ves
32
ff
ff
36
p
40
cresc.
45
Slightly More Lyrical
P. Mute Gtr/ Drums Change
ff

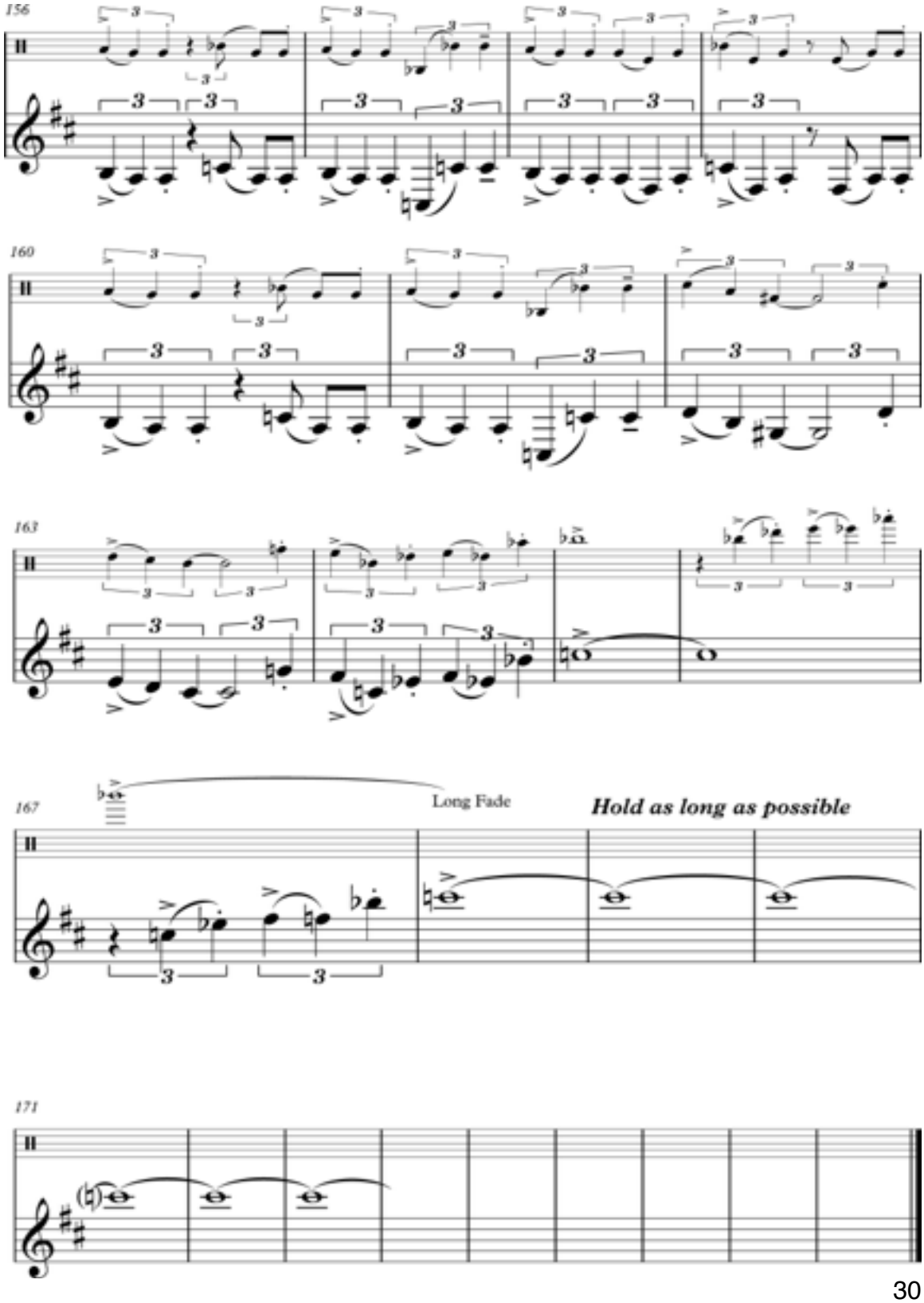

49
53
mf cresc.
57
ff
ff
61
mf
mf
B With great swells in dynamic
65
echoes
f


70
p
76
f
pp
80
p
f
p
85
f sost.
cresc.


90
Big Drum Fills
C With a thin sound, mysteriously
94
Tremelo starts
New Tone
ff
ppp
98
mf
102
ppp
106
mf

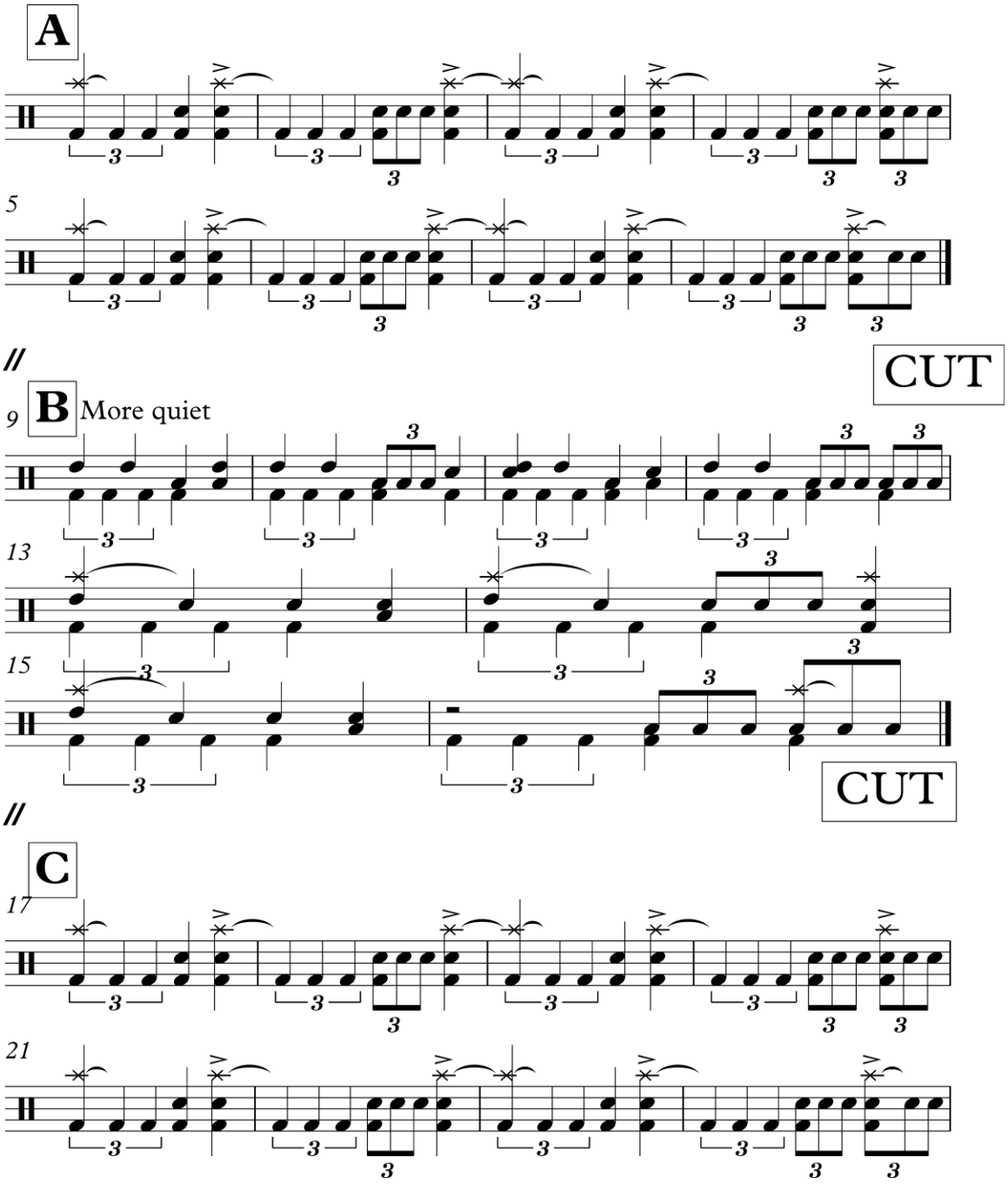

110
Pulse
New Tone
ppp
f
114
3
mf
mp
118
3
p
122
P. Mute Guitar
p
f
126
3
ff
f
D
Big Chord
130
New Tone
3
ff

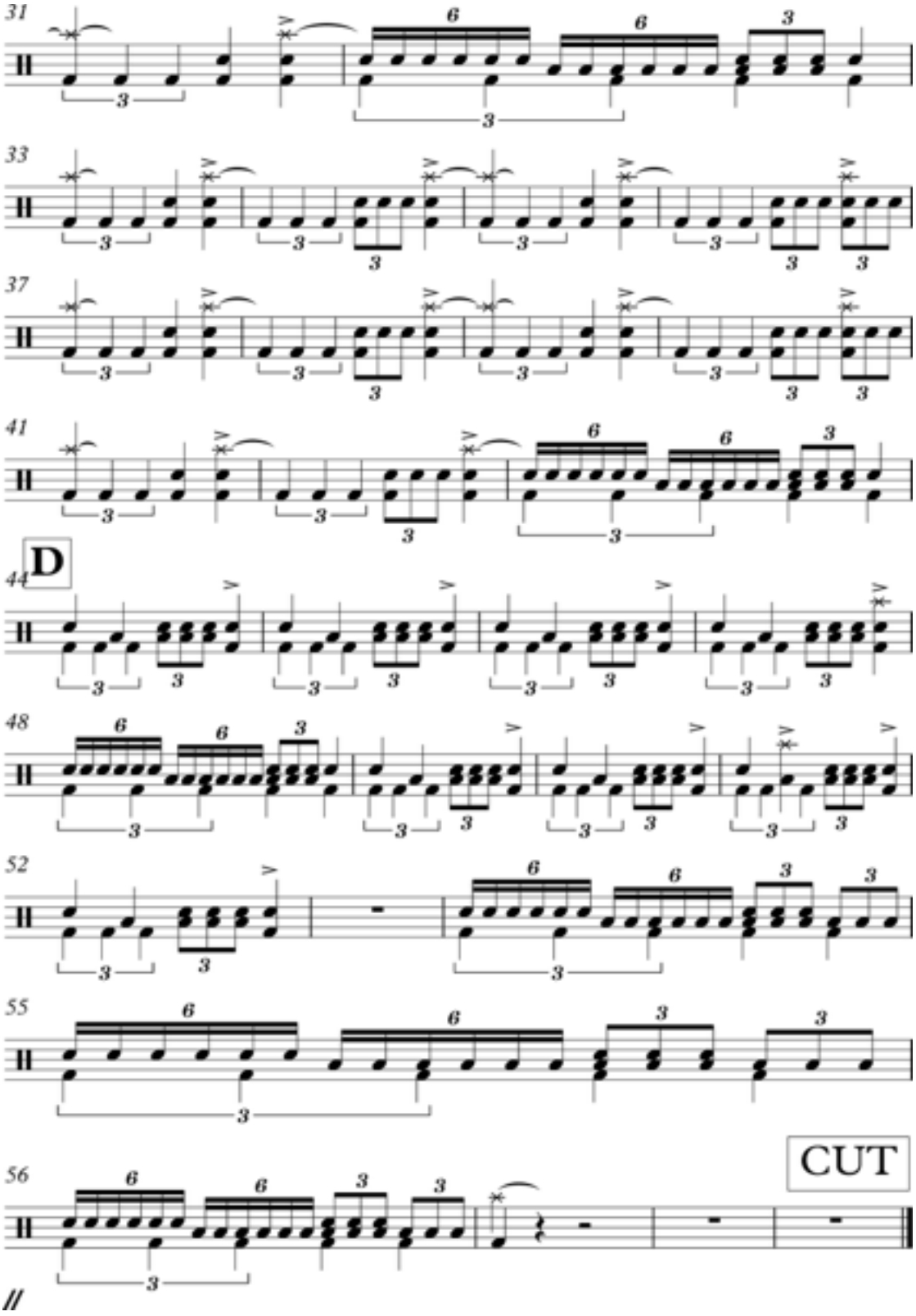

135
Increasingly intense
New Tone
sost.
140
Big Chord
New Tone
144
f
ff
148
Elec. Gtr
152
E
Heavily
ff
ff

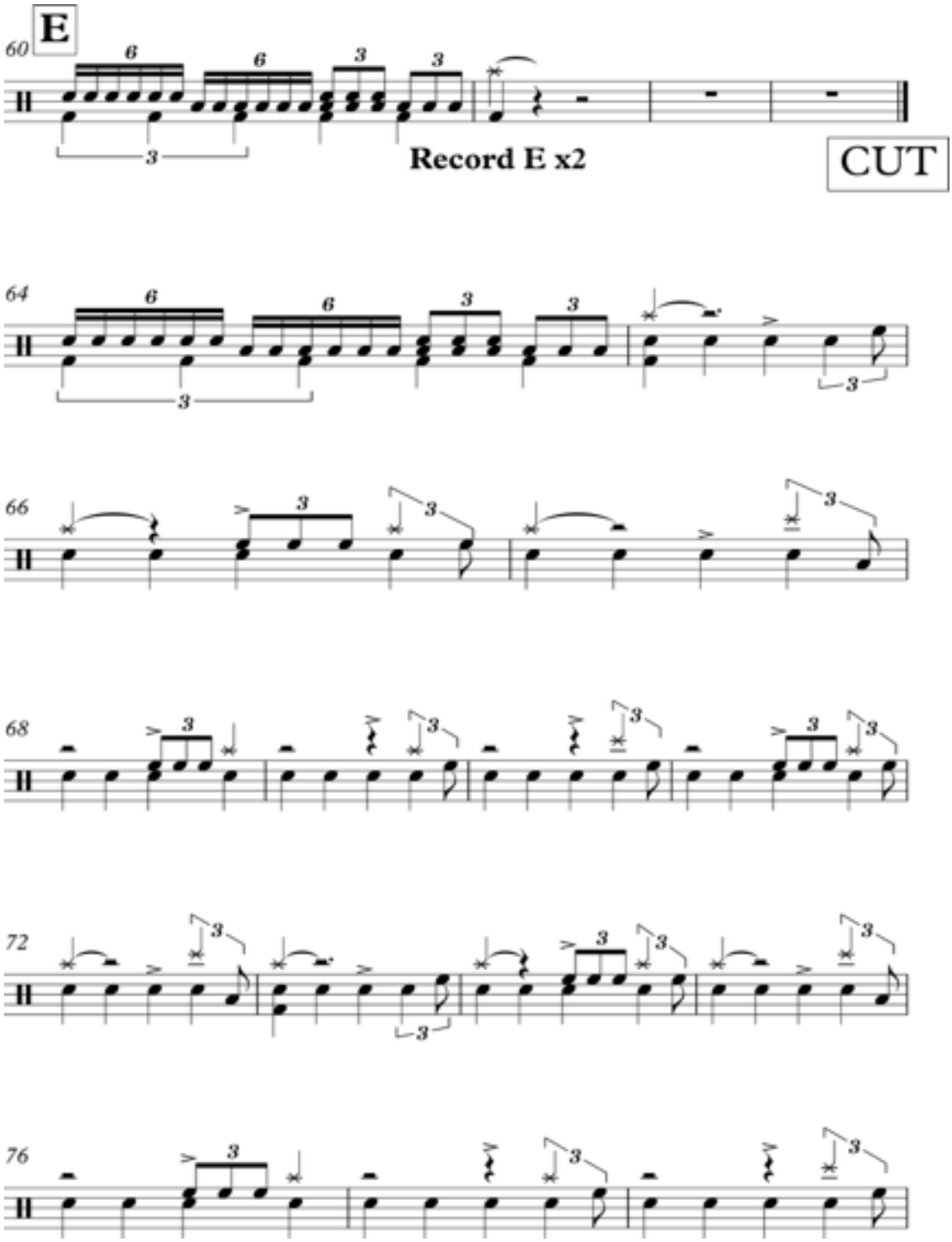

156
160
163
167
Long Fade
Hold as long as possible
171

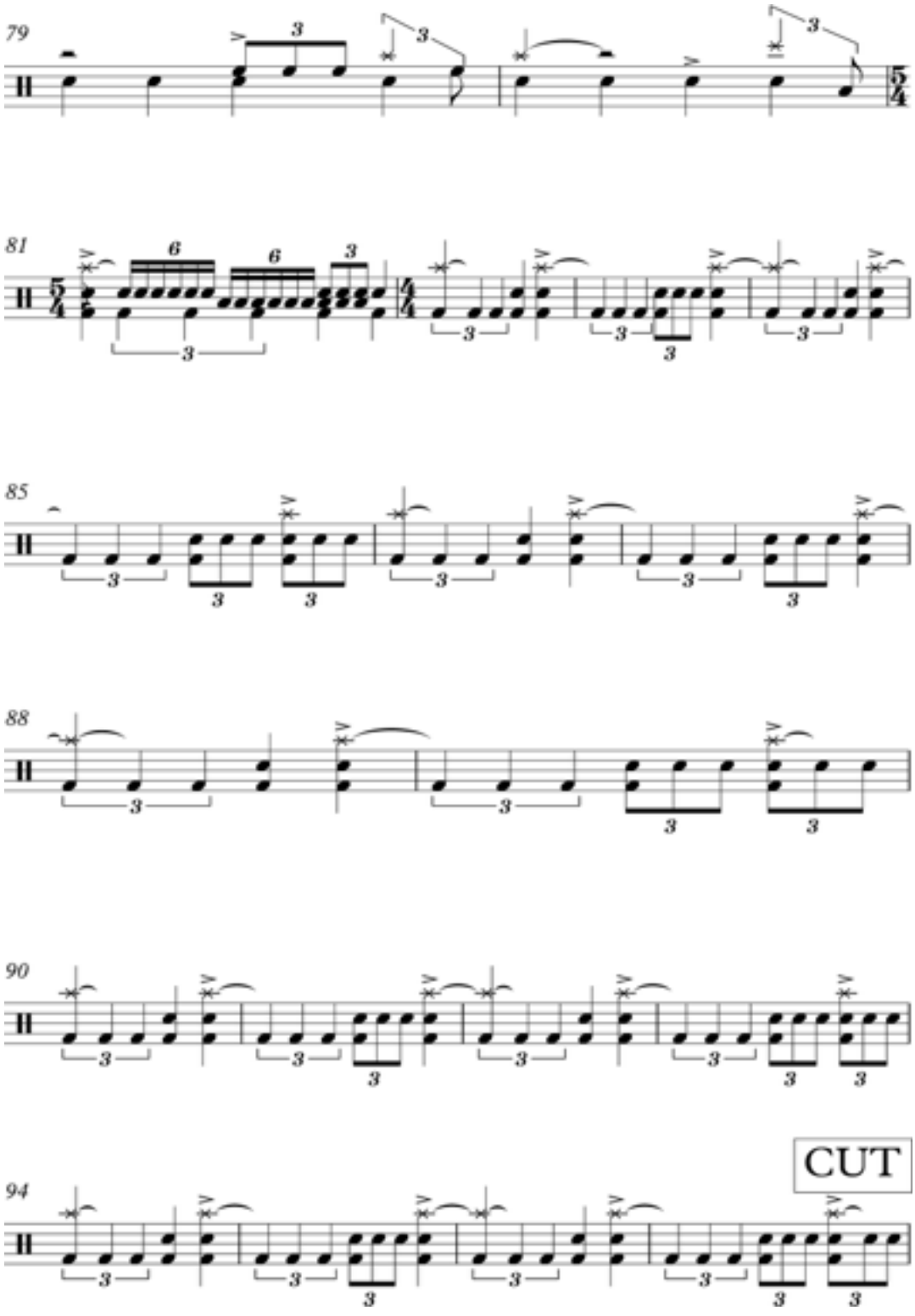
APPENDIX B

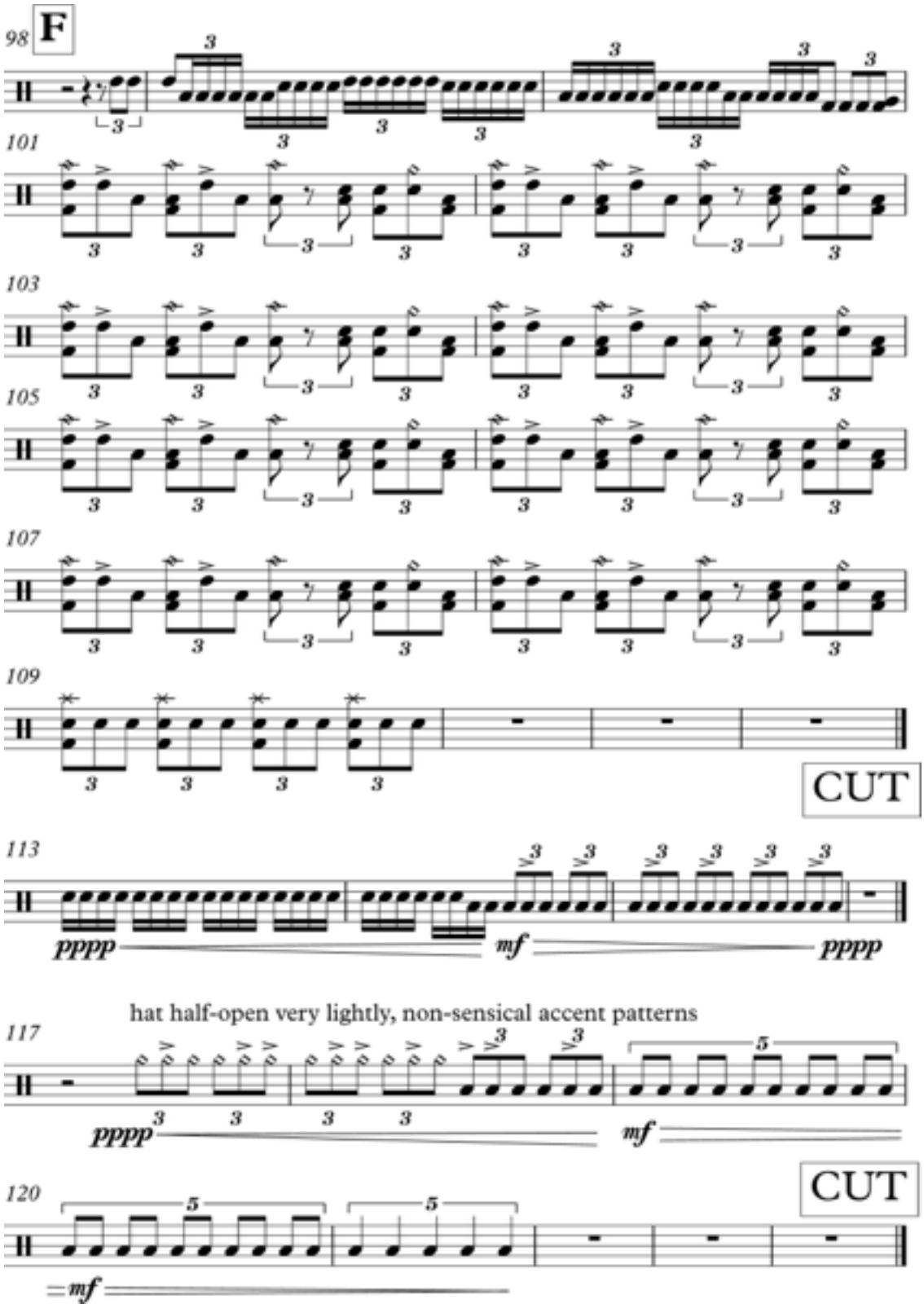
SCORE FOR DRUM SET RECORDING SESSION




31
33
37
41
D
44
48
52
55
CUT
56


60
E
Record E x2
CUT
64
66
68
72
76


79
81
85
88
90
94
CUT


98
F
101
103
105
107
109
CUT
113
pppp
mf
pppp
hat half-open very lightly, non-sensical accent patterns
117
pppp
mf
120
CUT
mf